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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,673	06/04/2001	Kevin Robert Coffey	SJO919990221US1	5786

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William D. Gill
IBM Corporation
Intellectual Property Law
5600 Cottle Road (L2PA/0142)
San Jose, CA 95193

EXAMINER

FABER, ALAN

ART UNIT PAPER NUMBER

2651

DATE MAILED: 09/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,673

Applicant(s)

COFFEY ET AL.

Examiner

Alan Faber

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6,9 and 14-20 is/are allowed.
- 6) ☒ Claim(s) 1,4,5,7,8,10 and 13 is/are rejected.
- 7) ☒ Claim(s) 2,3,11 and 12 is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. Applicant's election with traverse of claims 1-20 in Paper No. 5 is acknowledged.

The traversal is on the ground(s) that the claims do not read directly on any of the specific disk embodiments. This is not found persuasive because independent claims 1, 7, 10, 14 broadly recite records that could apply to the elected species of Figures 4a and b. Moreover, no evidence showing that the species are obvious variants has been supplied.

The requirement is still deemed proper and is therefore made FINAL.

2. Coffey and Nakajima are cited as of interest.

3. The abstract of the disclosure is objected to because it is too long. The abstract is limited to 150 words or less. See 37 CFR 1.72(b). Correction is required. See MPEP § 608.01(b).

4. The disclosure is objected to because of the following informalities: the missing serial number must be supplied at page 1, lines 5-9.

Appropriate correction is required.

5. The drawings are objected to because the lines are improper. See form 948 in paper no. 3. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

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6. Claims 2,3,11,12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 6,9,14-20 are allowed.

8. The following is a statement of reasons for the indication of allowable subject matter: in claims 2,3,6,9,11,12, the cited prior art fails to show the limitations drawn to a magnetic write head comprising a very small aperture laser (VSAL) and in claims 14-20, the cited prior art fails to show a method of writing data on magnetic recording media comprising the step of providing a thermal spring magnetic recording media having first and second Curie temperatures.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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10. Claims 1,4,5,7,8,10,13, are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,016,290 (hereinafter "Chen").

Chen shows the limitations of claim 1 drawn to a magnetic write head, comprising an optical element 92 for providing a thermal gradient in a magnetic medium 14 (note that the region heated by the laser and the adjacent region not heated by the laser, form a thermal gradient), said optical element having an emitting surface 290; and a magnetic element 50 for providing a magnetic field gradient in the recording media (note that the region of high magnetic field at the element 50 and the adjacent area not affected by the magnetic field, form a magnetic field gradient), said magnetic element 50 located on the emitting surface 290 (Fig. 6).

Chen shows the limitations of claim 4 drawn to an electrically conductive layer providing a path for the electrical current flow 94.

Chen shows the limitations of claim 5 drawn to a ferromagnetic layer providing magnetic pole 85, 96.

Chen shows the limitations of claim 7 drawn to a magnetic read/write head, comprising an optical element 92, 88 having an emitting surface 290 and a side surface 88; and a magnetic element 50; and a magnetic read head 61 adjacent to the side surface, said read head including a magnetoresistive sensor (col. 4, l. 31).

Chen shows the limitations of claim 8 drawn to a GMR sensor (col. 4, l. 31).

Chen shows the limitations of claim 10 drawn to a magnetic disk 14, a magnetic read/write head 50, a magnetic write head 60 including an optical element 92, 88 having an emitting surface 290 and a side surface 88, and a magnetic element 60 located on

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the emitting surface; a magnetic read head 61 adjacent the side surface 88, the read head including a MR sensor (col. 4, l. 31); an actuator 19, 20; and a recording channel 100, 102.

Chen shows the limitations of claim 13 drawn to a GMR sensor (col. 4, l. 31).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Faber whose telephone number is (703) 308-4816. The examiner can normally be reached on flextime (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



Alan Faber
Primary Examiner
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